

**Issue Paper**  
**Optional Peer Review Process for Geotechnical Reports**

**ISSUE:**

Occasionally, projects submitted to DSA contain alternate foundation types or ground improvement methods that require geotechnical engineer review. CGS and DSA do not have geotechnical engineers on staff and currently do have the ability to contract out work to geotechnical engineers on a project by project basis. Due to the variability in the need for geotechnical engineers and budgetary constraints, hiring permanent staff or creating a consultant contract list have not been employed. In lieu of those two options, we are proposing a peer review process that is paid by the Districts to address alternate foundation types or ground improvement methods.

**PROPOSAL:**

Add the following section to 2013 CBC Chapter 18A:

**1803A.8 Geotechnical Peer Review.** *When alternate foundations designs or ground improvements are employed or where slope stabilization is required, a qualified peer review by a California-licensed geotechnical engineer in accordance with Section 3422 may be required by the enforcement agency. In Section 3422, where reference is made to structural or seismic-resisting system, it shall be replaced with geotechnical, foundation, or ground improvement, as appropriate.*

For convenience, 2013 CBC Section 3422 is shown below:

**3422.1 General.** *Independent peer review is an objective, technical review by knowledgeable reviewer(s) experienced in the structural design, analysis and performance issues involved. The reviewer(s) shall examine the available information on the condition of the building, the basic engineering concepts employed and the recommendations for action.*

**3422.3 Qualifications and terms of employment.** *The reviewer(s) shall be independent from the design and construction team.*

**3422.3.1** *The reviewer(s) shall have no other involvement in the project before, during or after the review, except in a review capacity.*

**3422.3.2** *The reviewer(s) shall be selected and paid by the owner and shall have technical expertise in the evaluation and retrofit of buildings similar to the one being reviewed, as determined by the enforcement agency.*

**3422.3.3** *The reviewer (or in the case of review teams, the chair) shall be a California-licensed structural engineer who is familiar with the technical issues and regulations governing the work to be reviewed.*

**Exception:** *Other individuals with acceptable qualifications and experience may be a peer reviewer(s) with the approval of the building official.*

**3422.3.4** *The reviewer shall serve through completion of the project and shall not be terminated except for failure to perform the duties specified herein. Such termination shall be in writing with copies to the enforcement agency, owner and the registered design professional. When a reviewer is terminated or resigns, a qualified replacement shall be*

*appointed within 10 working days, and the reviewer shall submit copies of all reports, notes and correspondence to the responsible building official, the owner and the registered design professional within 10 working days of such termination.*

**3422.3.5** *The peer reviewer shall have access in a timely manner to all documents, materials and information deemed necessary by the peer reviewer to complete the peer review.*

**3422.4 Scope of review.** *Review activities shall include, where appropriate, available construction documents, design criteria and representative observations of the condition of the structure, all inspection and testing reports, including methods of sampling, analytical models and analyses prepared by the registered design professional and consultants, and the retrofit or repair design. Review shall include consideration of the proposed design approach, methods, materials, details and constructability.*

**3422.6 Response and resolutions.** *The registered design professional shall review the report from the reviewer(s) and shall develop corrective actions and responses as appropriate. Changes observed during construction that affect the seismic-resisting system shall be reported to the reviewer in writing for review and recommendations. All reports, responses and resolutions prepared pursuant to this section shall be submitted to the responsible enforcement agency and the owner along with other plans, specifications and calculations required. If the reviewer resigns or is terminated prior to completion of the project, then the reviewer shall submit copies of all reports, notes and correspondence to the responsible building official, the owner and the registered design professional within 10 working days of such termination. Changes observed during construction that affect the seismic-resisting system shall be reported to the reviewer in writing for review and recommendation.*

**3422.5 Reports.** *The reviewer(s) shall prepare a written report to the owner and building official that covers all aspects of the review performed, including conclusions reached by the reviewer(s). Reports shall be issued after the schematic phase, during design development, and at the completion of construction documents but prior to submittal of the project plans to the enforcement agency for plan review. When acceptable to the building official, the requirement for a report during a specific phase of the project development may be waived.*

*Such reports should include, at the minimum, statements of the following:*

- 1. Scope of engineering design peer review with limitations defined.*
- 2. The status of the project documents at each review stage.*
- 3. Ability of selected materials and framing systems to meet performance criteria with given loads and configuration.*
- 4. Degree of structural system redundancy and the deformation compatibility among structural and nonstructural components.*
- 5. Basic constructibility of the retrofit or repair system.*
- 6. Other recommendations that would be appropriate to the specific project.*
- 7. Presentation of the conclusions of the reviewer identifying any areas that need further review, investigation and/or clarification.*
- 8. Recommendations.*

*The last report prepared prior to submittal of permit documents to the enforcement agency shall include a statement indicating that the design is in conformance with the approved evaluation and design criteria*

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**3422.7 Resolution of conflicts.** *When the conclusions and recommendations of the peer reviewer conflict with the registered design professional's proposed design, the enforcement agency shall make the final determination of the requirement for the design.*

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